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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

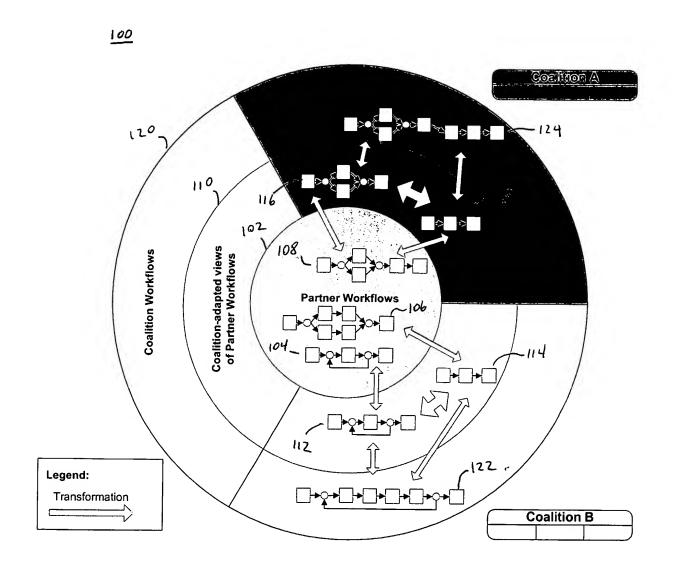


FIG. 1

Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

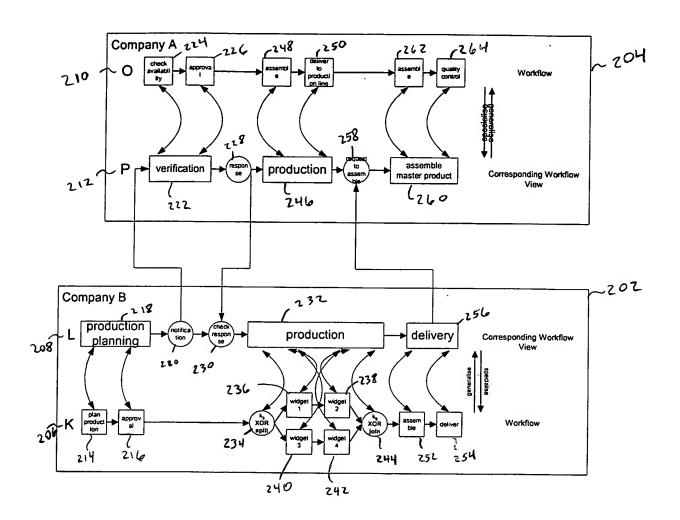
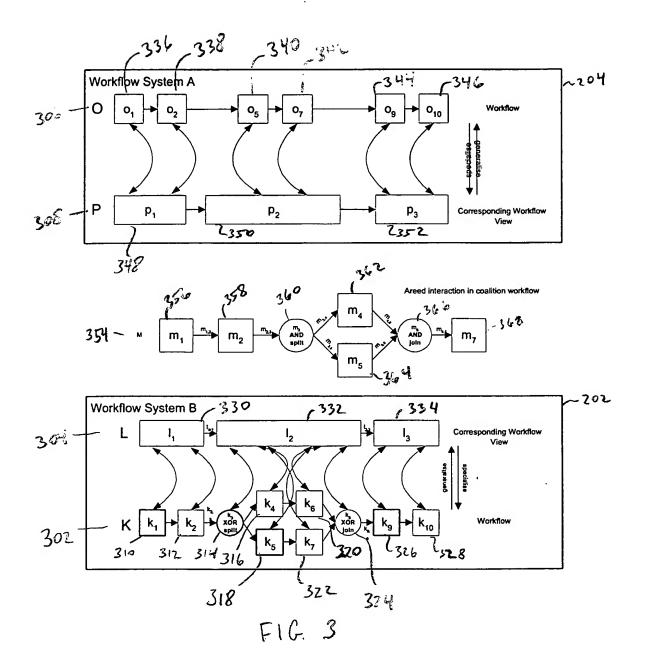


FIG. 2

Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

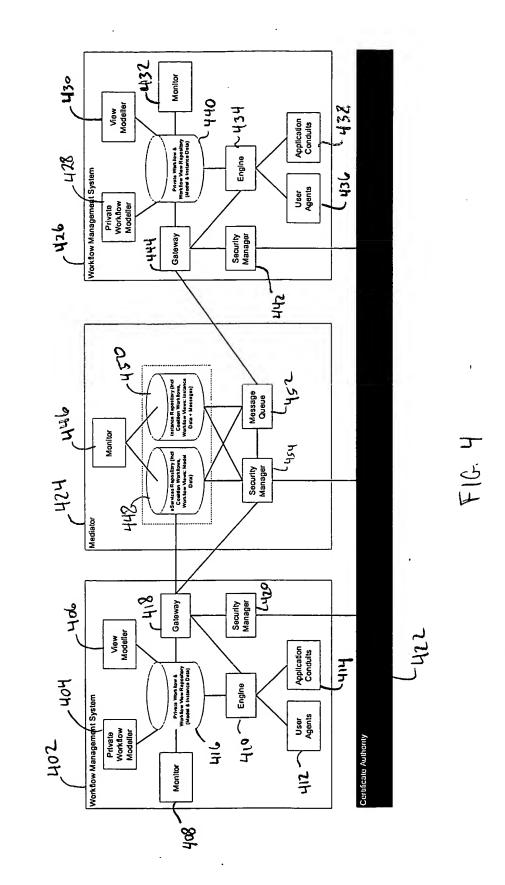


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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

**WORKFLOWS** 

700



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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS Page 5 of 53

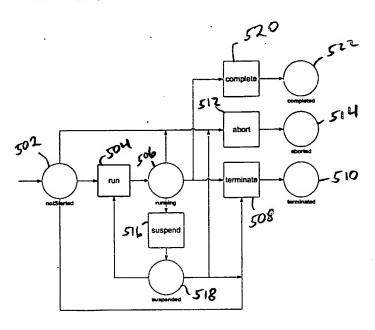
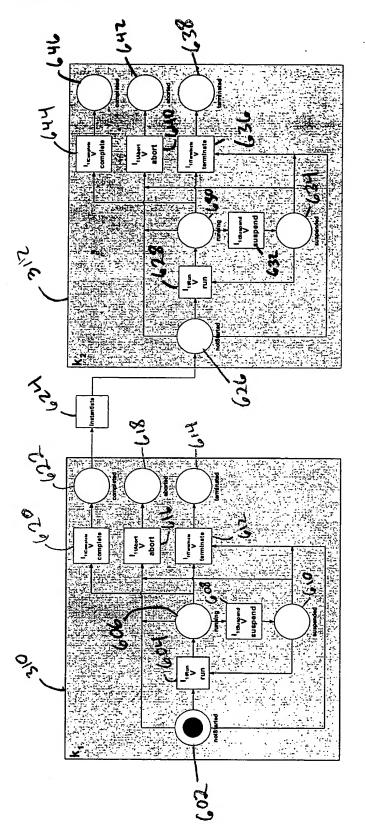
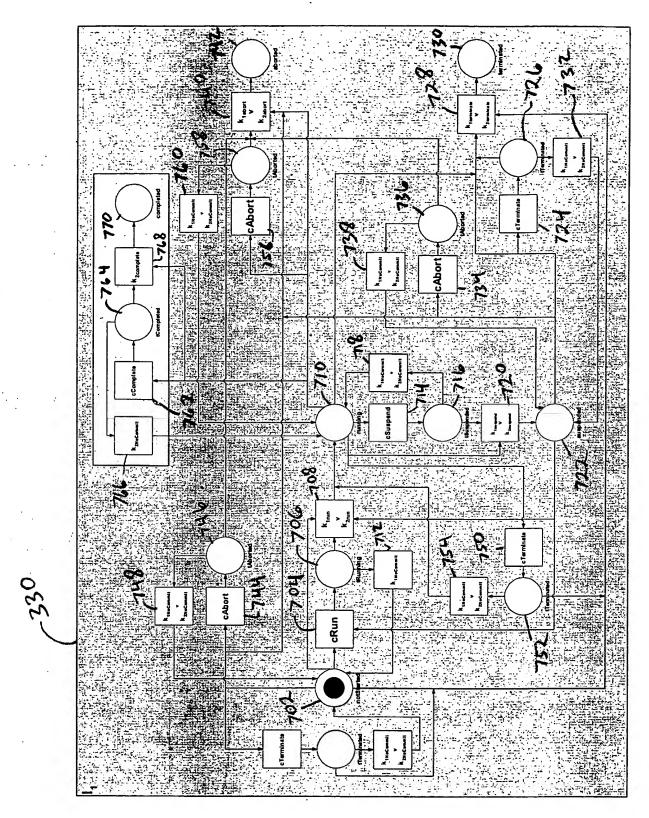


FIG. 5

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TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS Page 6 of 53



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TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS



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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS Page 8 of 53

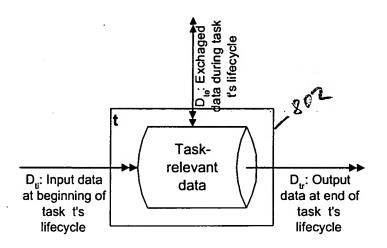


FIG. 8

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

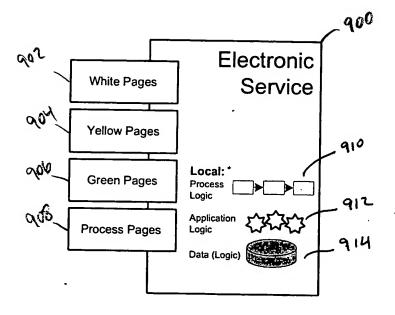


FIG. 9

Matter No.: 13909-026002 Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

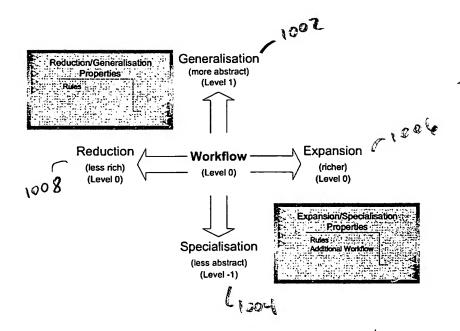


FIG. 10

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

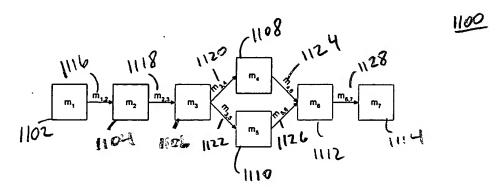


FIG. 11

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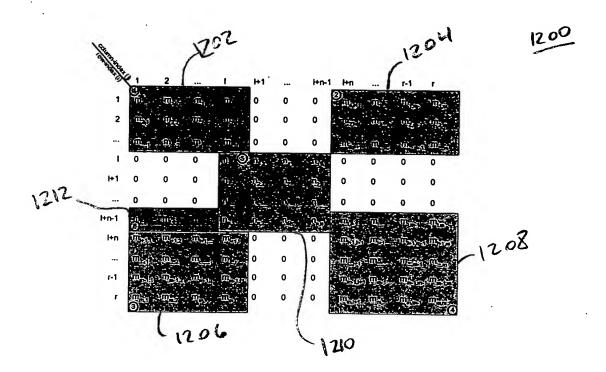


FIG. 12

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1300

Matter No.: 13909-026002 Page 13 of Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

**WORKFLOWS** 

1306 0 m 0 m+n-1 0 0 1308

FIG. 13

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

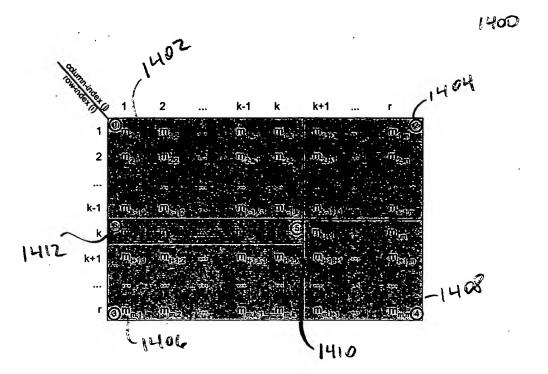


FIG. 14

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Matter No.: 13909-026002 Page 15 of a Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

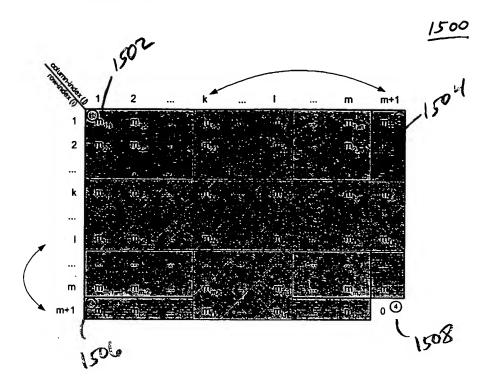


FIG. 15

Matter No.: 13909-026002 Page 16 of S Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS Page 16 of 53

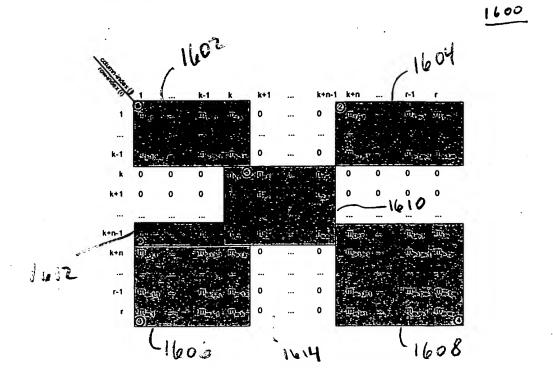


FIG. 16

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

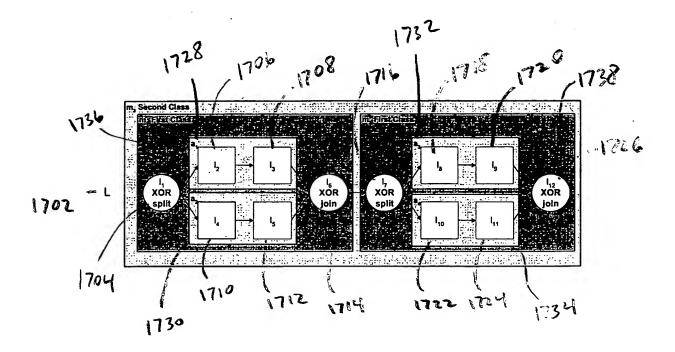


FIG. 17

Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

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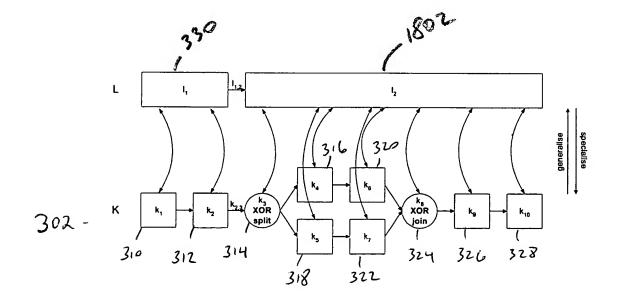


FIG. 18

Matter No.: 13909-026002 Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

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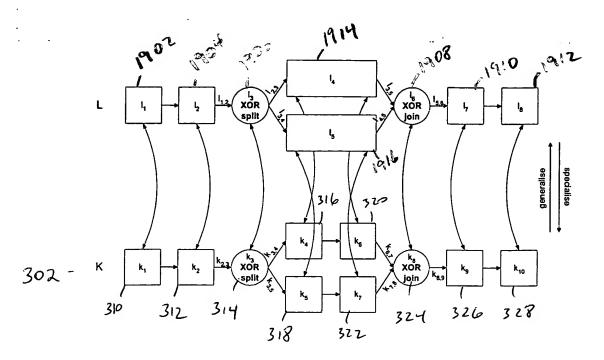
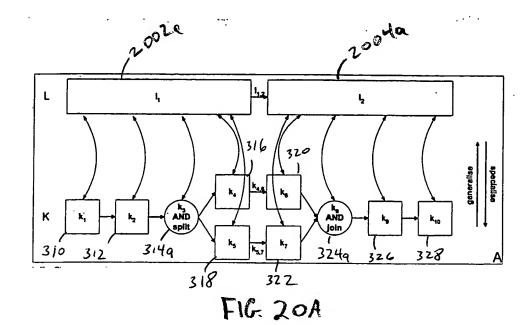


FIG. 19

Matter No.: 13909-026002 Page 20 of Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED Page 20 of 53

**WORKFLOWS** 

302a

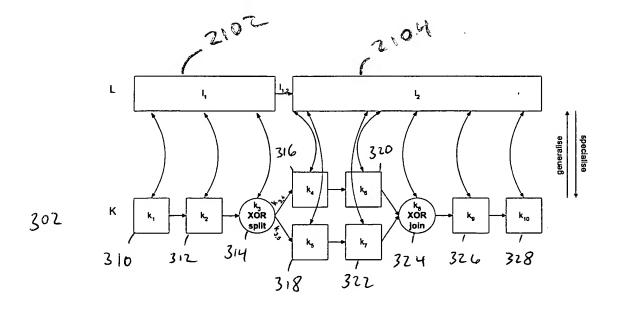


2004 6 ı, XOR split XOR Join 310 312 314 324 326 328 318 322

FIG 20B

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS



F16.21

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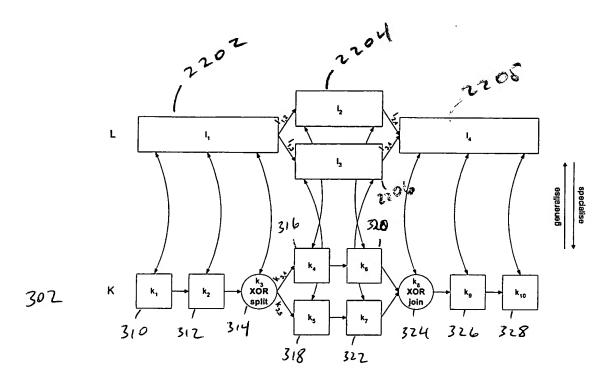


FIG. 22

Matter No.: 13909-026002 Page 23 of 9 Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

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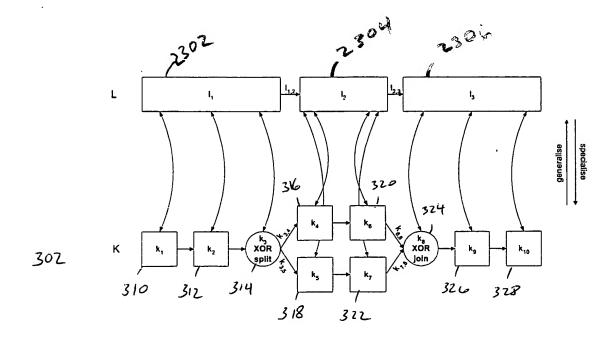


FIG 23

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

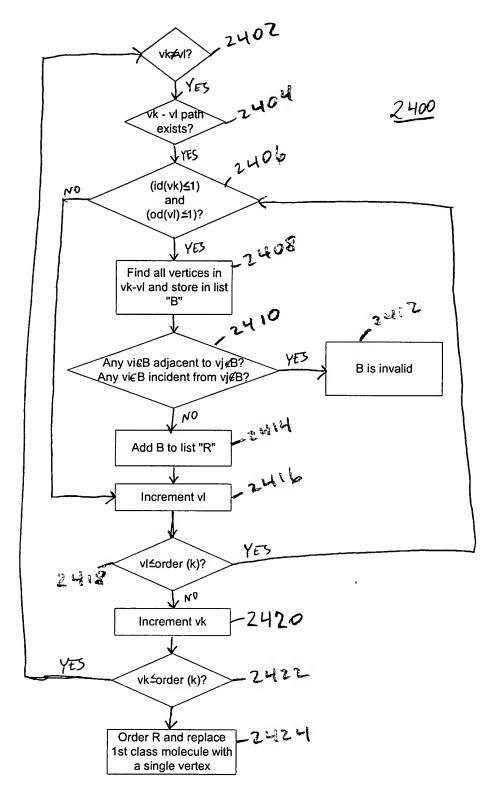
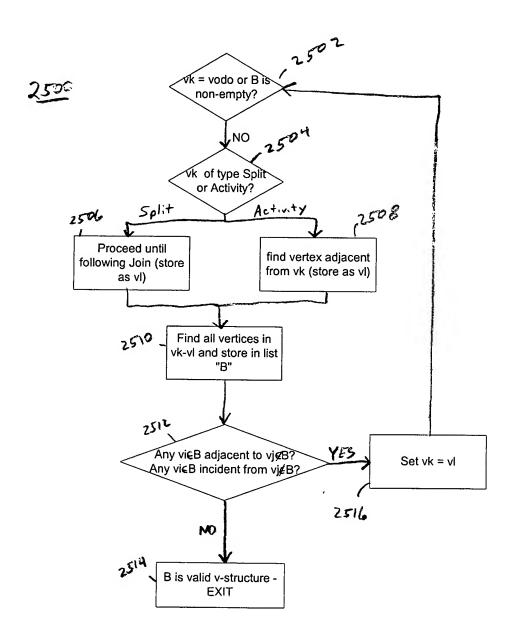


FIG. 24

Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

WORKFLOWS



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FIG. 25

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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

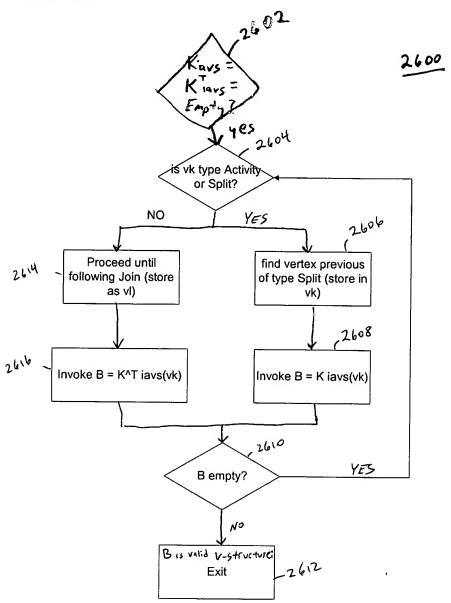


FiG. 26

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

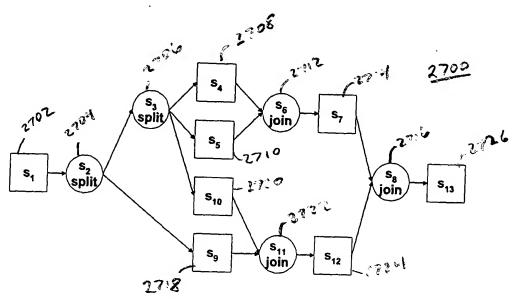


FIG. 27A

$v_k$	$S iavs_e(v_k)$
Sı	$\{s_1, s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
<i>s</i> <sub>2</sub>	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
<i>S</i> 3	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
S4	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
S5	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
<i>S</i> <sub>6</sub>	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
57	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
28	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
59	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
S10	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
S11	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
S <sub>12</sub>	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}\}$
S13	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{11}, s_{12}, s_{13}\}$

FIG. 27B

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Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

WORKFLOWS

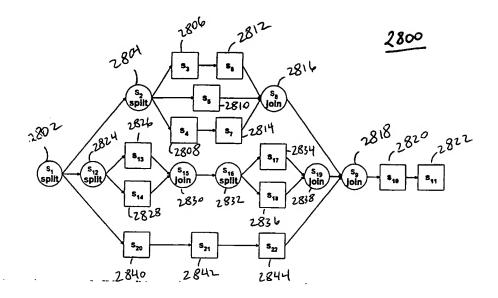


FIG. 28A

$v_k$	$S$ iavs <sub>e</sub> $(\nu_k)$
Sı	$\{s_1, s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{12}, s_{13}, s_{14}, s_{15}, s_{16}, s_{17}, s_{18}, s_{19}, s_{20}, s_{21}, s_{22}\}$
\$2	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8\}$
<b>S</b> 3	$\{s_3,s_6\}$
S4	$\{s_4,s_7\}$
S5	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8\}$
s <sub>6</sub>	$\{s_3,s_6\}$
<i>S</i> 7	{s4,s7}
28	$\{s_2, s_3, s_4, s_5, s_6, s_7, s_8\}$
59	$\{s_{1}, s_{2}, s_{3}, s_{4}, s_{5}, s_{6}, s_{7}, s_{8}, s_{9}, s_{12}, s_{13}, s_{14}, s_{15}, s_{16}, s_{17}, s_{18}, s_{19}, s_{20}, s_{21}, s_{22}\}$
S10	$\{s_1, s_2, s_3, s_4, s_5, s_6, s_7, s_8, s_9, s_{10}, s_{12}, s_{13}, s_{14}, s_{15}, s_{16}, s_{17}, s_{18}, s_{19}, s_{20}, s_{21}, s_{22}\},\$
	$\{s_{10},s_{11}\}$
<i>s</i> 11	$\{s_{10},s_{11}\}$
\$12	$\{s_{12}, s_{13}, s_{14}, s_{15}\}$
S13	$\{s_{12},s_{13},s_{14},s_{15}\}$
S14	$\{s_{12}, s_{13}, s_{14}, s_{15}\}$
515	$\{s_{12},s_{13},s_{14},s_{15}\}$
S16	$\{s_{16}, s_{17}, s_{18}, s_{19}\}$
S17	$\{s_{16}, s_{17}, s_{18}, s_{19}\}$
S18	$\{s_{16}, s_{17}, s_{18}, s_{19}\}$
519	$\{s_{16}, s_{17}, s_{18}, s_{19}\}$
S <sub>20</sub>	$\{s_{20}, s_{21}\}$
S21	$\{s_{20}, s_{21}\}, \{s_{21}, s_{22}\}$
S22	$\{s_{21}, s_{22}\}$

FIG. 28B

۲,

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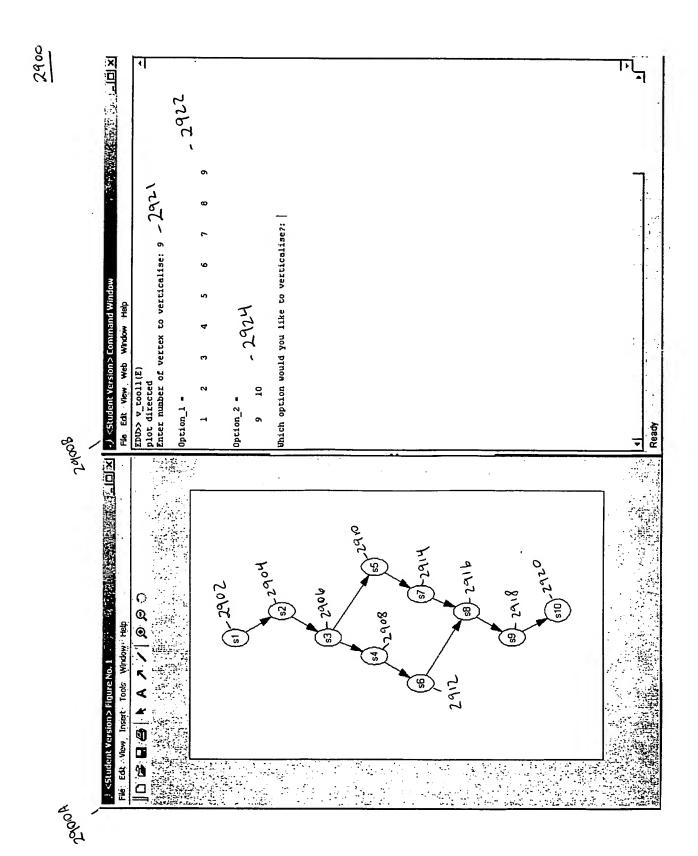


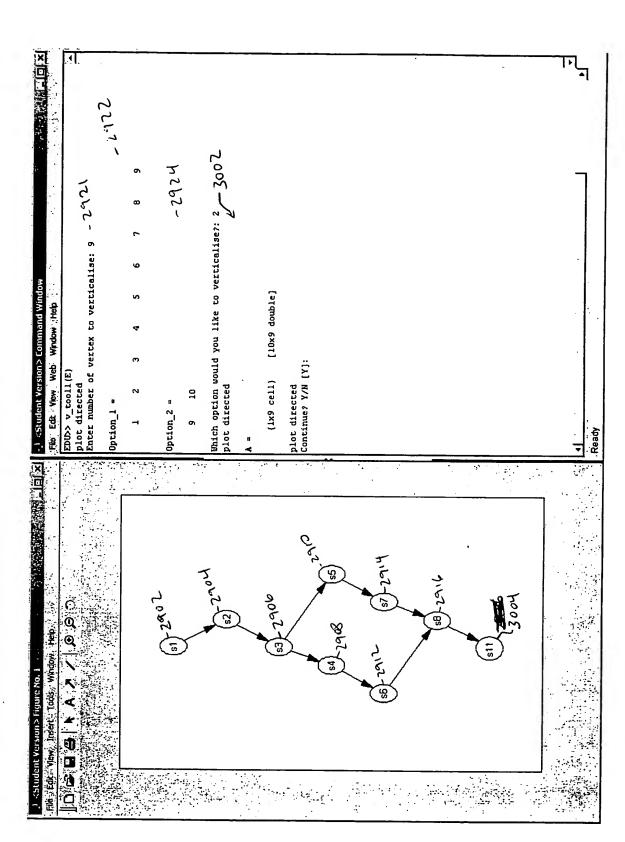
FIG. 29

FIG. 30

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

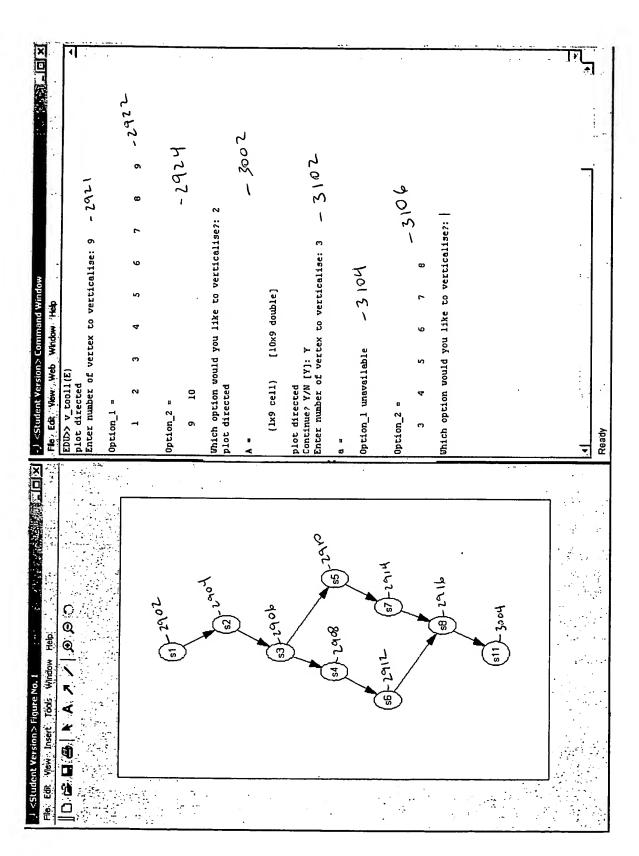
3000



Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

**WORKFLOWS** 

3100



Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

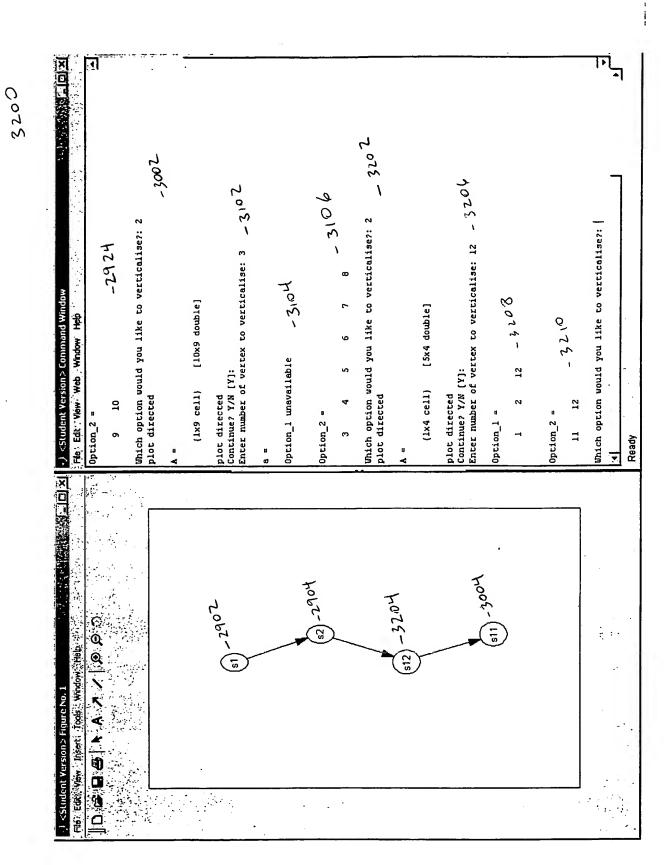


FIG. 32

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

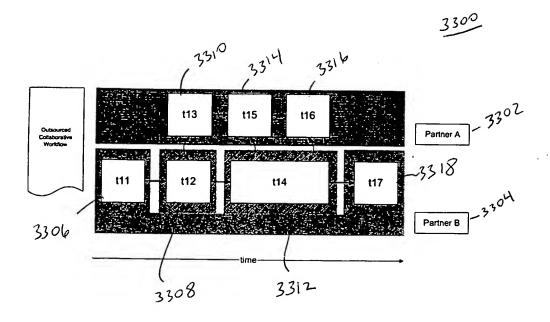


FIG. 33

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

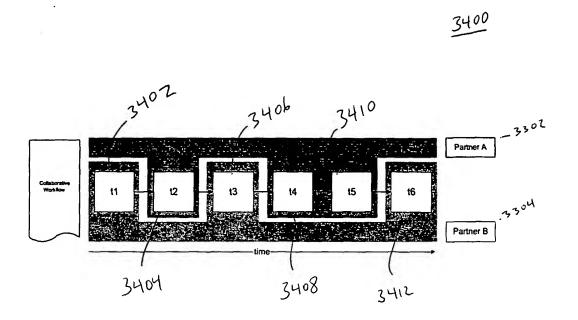


FIG. 34

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TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

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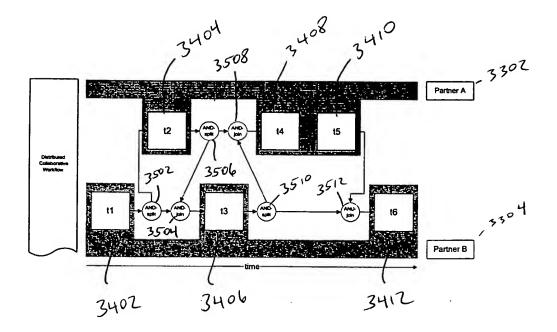
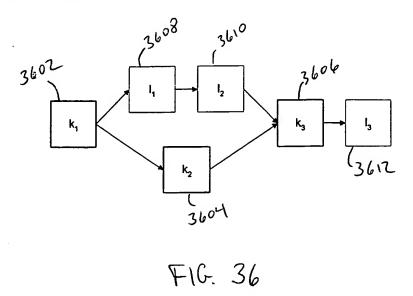


FIG. 35

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TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS



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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

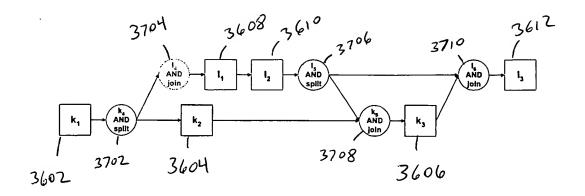


FIG. 37

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Matter No.: 13909-026002

Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

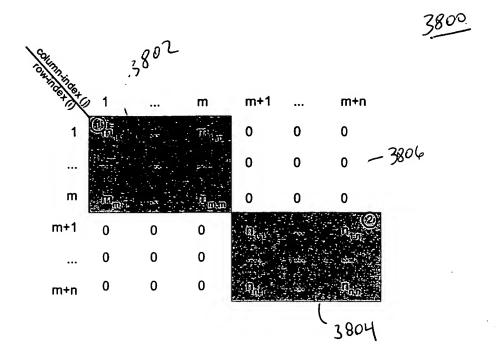


FIG. 38

Matter No.: 13909-026002 Page 39 of Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

3900

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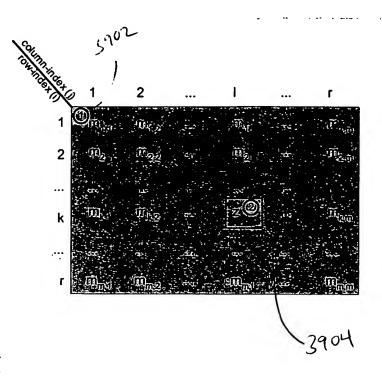


FIG. 39

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Matter No.: 13909-026002 Page 40 of Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

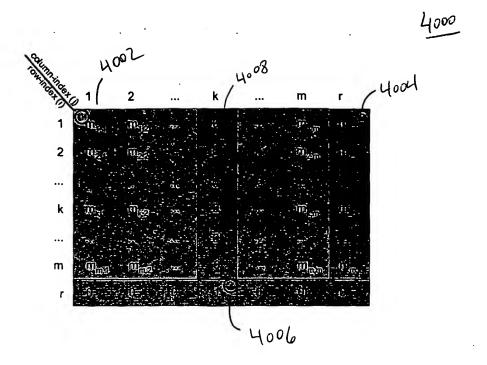


FIG. 40

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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

4100

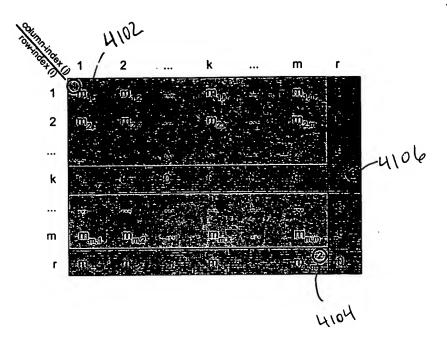
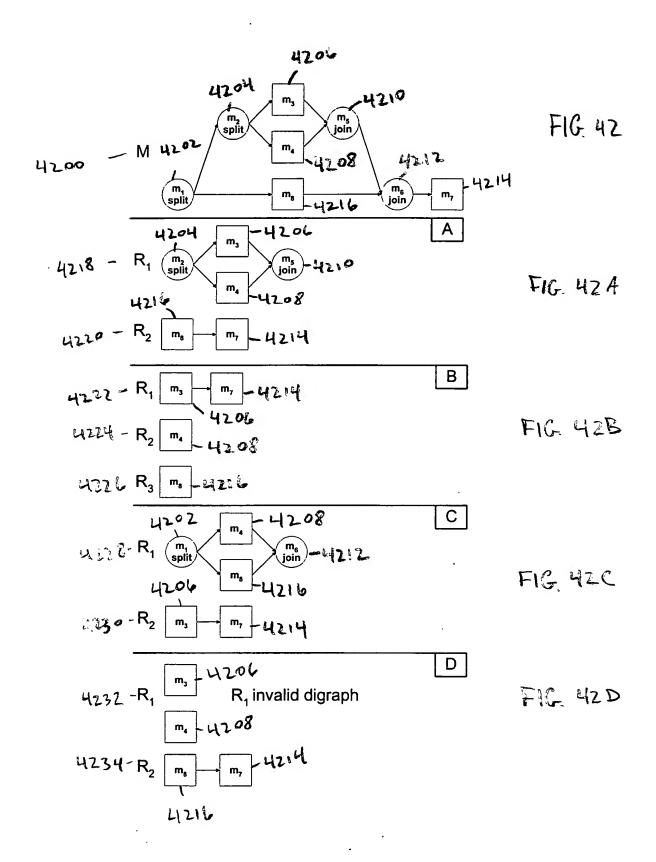


FIG. 41

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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED



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Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED
WORKFLOWS

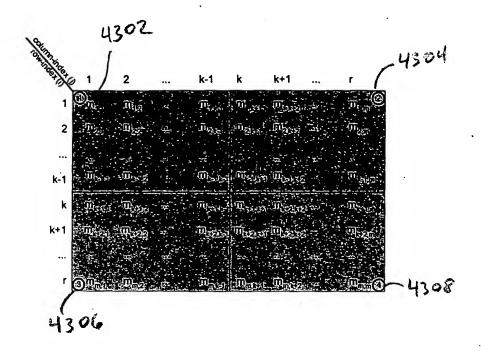


FIG. 43

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Matter No.: 13909-026002 Page 44 of Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED WORKFLOWS

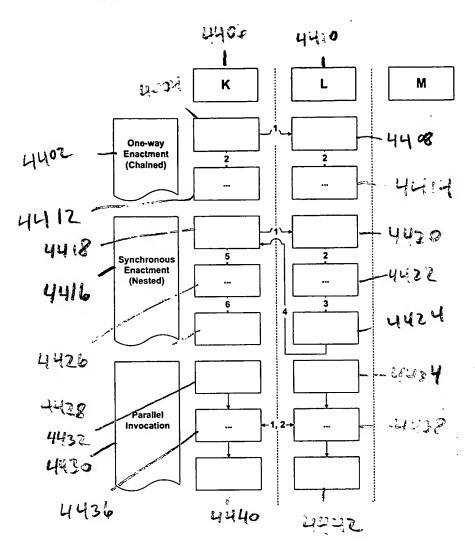


Fig. 44

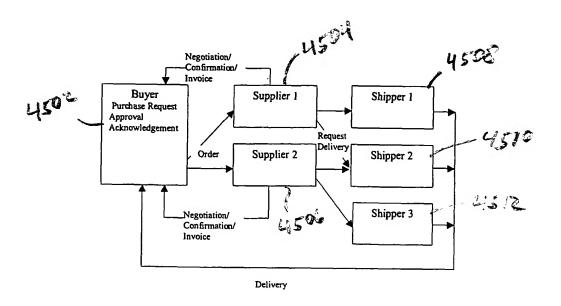
Page 45 of 53

Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

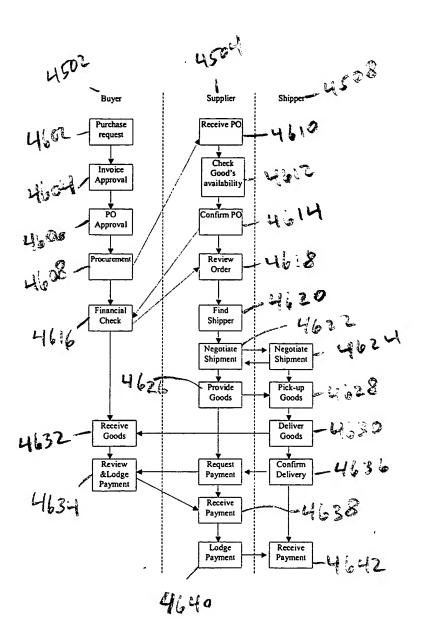
**WORKFLOWS** 

. . . .



F16. 45

Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED



F16. 46

Applicant(s): Karsten Schulz, et al.
TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

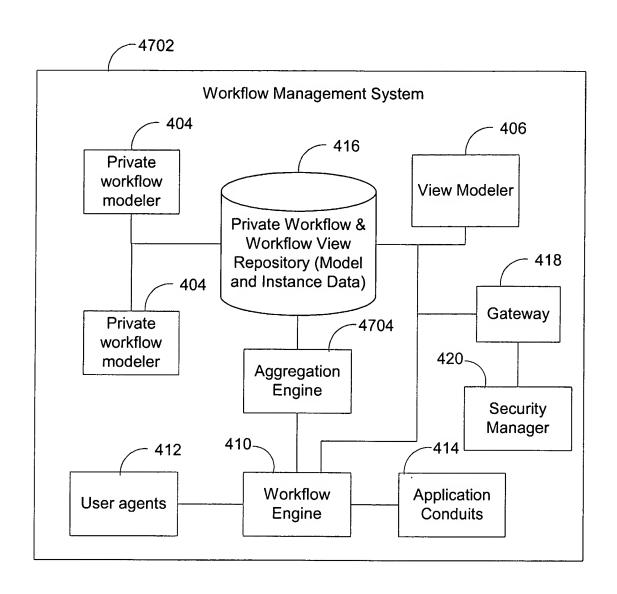


FIG. 47

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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

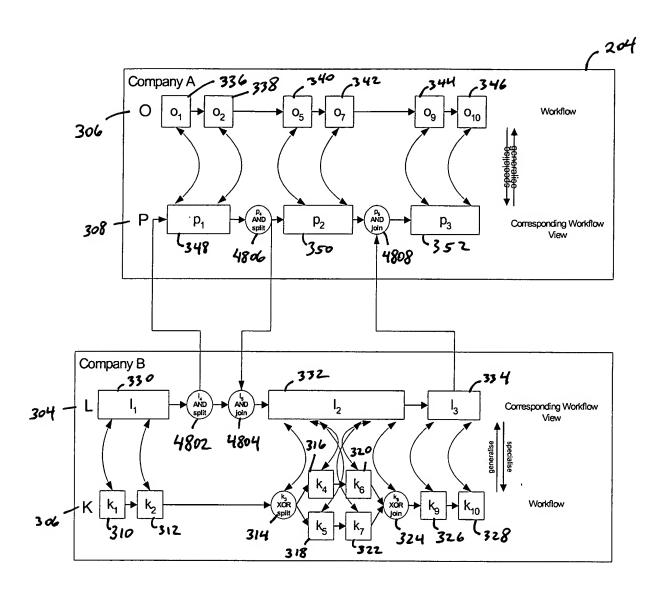


FIG. 48

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Matter No.: 13909-026002

Applicant(s): Karsten Schulz, et al. TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

**WORKFLOWS** 

## <u>4900</u>

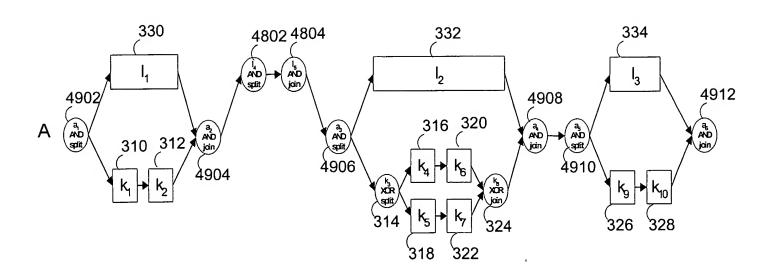


FIG. 49

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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

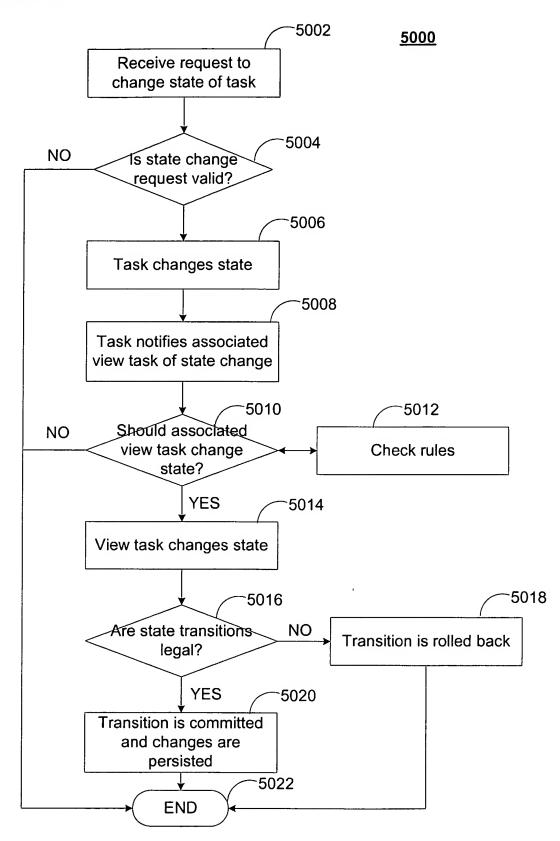


FIG. 50

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TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

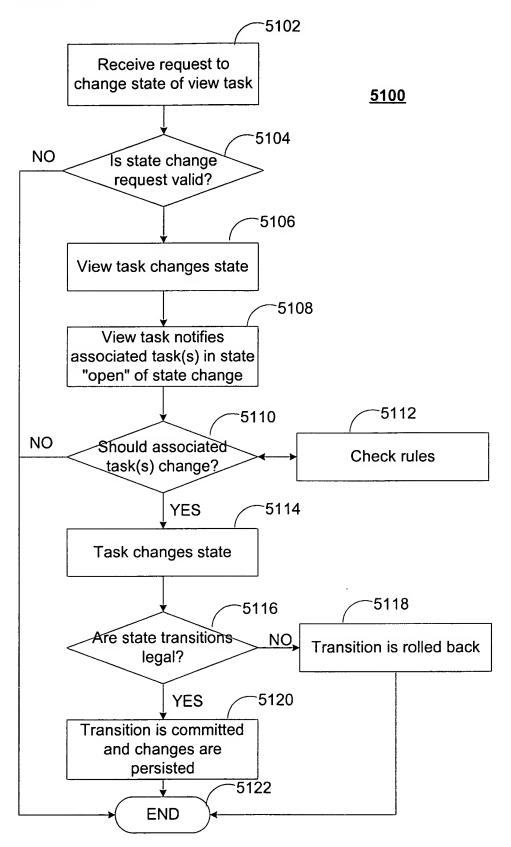


FIG. 51

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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

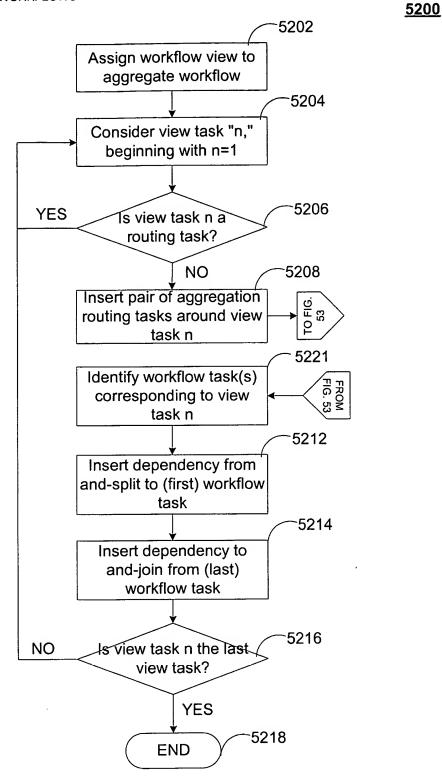


FIG. 52

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Applicant(s): Karsten Schulz, et al.

TRANSFORMATIONS BETWEEN PRIVATE AND SHARED

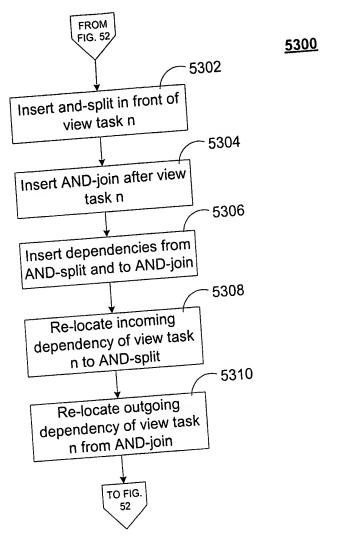


FIG. 53